

oxide's compositional formula  $\text{Li}_a\text{M}_2\text{Ni}_c\text{Co}_d\text{O}_2$  is Mn.

18. The nonaqueous electrolyte secondary battery as recited in claim 17, characterized in that  $0.1 \leq d/(c + d) \leq 0.5$  is satisfied in the second oxide's compositional formula  $\text{Li}_a\text{M}_2\text{Ni}_c\text{Co}_d\text{O}_2$ .

19. The nonaqueous electrolyte secondary battery as recited in claim 15, characterized in that said third oxide is represented by the compositional formula  $\text{Li}_e\text{M}_3\text{Co}_{1-f}\text{O}_2$  (where, M3 is at least one element selected from the group consisting of Mg and Ti,  $0 < e < 1.3$  and  $0.02 \leq f \leq 0.2$ ).

20. The nonaqueous electrolyte secondary battery as recited in any one of claims 11 - 19, characterized in that said first, second and third oxides are mixed in the ratio by weight of (first oxide) to (second oxide + third oxide) = 20:80 - 80:20.

21. The nonaqueous electrolyte secondary battery as recited in claim 20, characterized in that said second and third oxides are mixed in the ratio by weight of (second oxide) to (third oxide) = 90:10 - 10:90.

22. The nonaqueous electrolyte secondary battery as recited in any one of claim 11 - 21, characterized in that said first oxide has a mean particle diameter of 5 - 30  $\mu\text{m}$ .

23. The nonaqueous electrolyte secondary battery as recited in any one of claim 11 - 22, characterized in that said second oxide has a mean particle diameter of 3 - 15  $\mu\text{m}$ .

24. The nonaqueous electrolyte secondary battery as recited in any one of claim 11 - 23, characterized in that said third oxide has a mean particle diameter of 3 - 15  $\mu\text{m}$ .

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# ABSTRACT

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A nonaqueous electrolyte secondary battery  
characterized as using a mixture of a first oxide and a  
5 second oxide for its positive electrode material. The first  
oxide is a spinel oxide consisting substantially of lithium,  
manganese, a metal other than manganese, and oxygen. The  
second oxide is different in composition from the first  
oxide and consists substantially of lithium, nickel, cobalt,  
10 a metal other than nickel and cobalt, and oxygen.